Public Use Microdata Sample from decennial censuses, the National Survey of Experienced Scientists and Engineers, High School and Beyond, the Longitudinal Study of American Youth, the New Entrants Surveys, the National Educational Longitudinal Survey (NELS), the National Longitudinal Study of the High School Class of 1972, and the National Survey of Postsecondary Faculty. What is most needed is more methodical and more definitive analyses, not more data.

The book's overall lack of concern with "methodological correctness" is also reflected in its eagerness to embrace assertions that have not been proven scientifically. For example, Vetter cites a finding from an unpublished report: "it is interesting that women who choose engineering as a career are likely to have no brothers" (p. 32). This finding is invoked to support the idea that parents "discriminate against their daughters." Though the number of siblings is well known to affect achievement, the sex composition of siblings has not been proven to have much relevance. Puzzled by Vetter's citation, I contacted William LeBold at Purdue University, to whom the finding is attributed, and also, with the help of Kimberlee Akin, computed statistics from the 1994 wave of NELS. LeBold in response to my query said he had no direct evidence bearing on the issue, and our own results also clearly rejected the claim: the percentage of female students with brothers was 70.3 among 58 engineering students versus 72.3 among 2654 non-engineering students, a statistically insignificant difference. It is ironic that a myth is created in a section of the book on "myths and realities." Let us hope that it will not be spread further.

Though the book documents rather rapid progress in women's participation in SME since the 1950s, it gives no proven causal explanations for the increase. Although the future can be quite different from the past, understanding the recent past is a very helpful, if not the most helpful, aid in predicting the future. Because the book does not establish causal explanations for past experience, the merit of its policy recommendations is difficult to evaluate. It appears that the authors' recommendations were drawn mainly from their personal experiences, intuitions, and political convictions.

In sum, this book contains many interesting but unproven ideas and provides a good reference to many studies, some of which are of questionable scientific merit.

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Books Received

Academic Environment. A Handbook for Evaluating Employment Opportunities in Science. Karl W. Lanks. 2nd ed. Taylor and Francis, Philadelphia, 1996. xii, 124 pp., illus. Paper, \$14.95.

Applied Continuum Mechanics. T. J. Chung. Cambridge University Press, New York, 1996. xii, 252 pp., illus. \$49.95.

The Biochemical Basis of Neuropharmacology. Jack R. Cooper, Floyd E. Bloom, and Robert H. Roth. 7th ed. Oxford University Press, New York, 1996. viii, 518 pp., illus. \$50.

Bioconjugate Techniques. Greg T. Hermanson. Academic Press, San Diego, 1996. xxvi, 785 pp., illus. \$99; paper, \$49.95.

Bioinformatics. From Nucleic Acids and Proteins to Cell Metabolism. Dietmar Schomburg and Uta Lessel, Eds. VCH, New York, 1995. x, 195 pp., illus. \$95. GBF Monographs, vol 18. From a conference, Braunschweig, Germany, Oct. 1995.

Chaos Theory in the Social Sciences. Foundations and Applications. L. Douglas Kiel and Euel Elliott, Eds. University of Michigan Press, Ann Arbor, 1996. viii, 349 pp., illus. \$54.50.

Charles Darwin's Letters. A Selection, 1825-1859. Frederick Burkhardt, Ed. Cambridge University Press, New York, 1996. xxvi, 249 pp. \$21.95.

Dance for Two. Selected Essays. Alan Lightman. Pantheon, New York, 1996. xiv, 171 pp. Paper, \$12 or C\$16.95.

Darwin and the Darwinian Revolution. Gertrude Himmelfarb. Elephant (Dee), Chicago, 1996. xii, 511 pp. Paper, \$16.95. Reprint, 1959 ed.

Darwin's Dangerous Idea. Evolution and the Meanings of Life. Daniel C. Dennett. Touchstone Books (Simon and Schuster), New York, 1996. 589 pp., illus. Paper, \$16 or C\$21.50. Reprint, 1995 ed.

Ecosystem Management. Selected Readings. Fred B. Samson and Fritz L. Knopf. Springer-Verlag, New York, 1996. xvi, 462 pp., illus. \$79.95; paper, \$29.

Einstein Atomized. More Science Cartoons. Sidney Harris. Copernicus (Springer-Verlag), New York, 1996. Unpaged, illus. Paper, \$14.

Einstein, History, and Other Passions. The Rebellion against Science at the End of the Twentieth Century. Gerald Holton. Addison-Wesley, Reading, MA, 1996. xii, 240 pp., illus., + plates. Paper, \$14 or C\$19. Reprint, 1995 ed.

Food Webs. Integration of Patterns and Dynamics. Gary A. Polis and Kirk O. Winemiller, Eds. Chapman and Hall, New York, 1996. xiv, 472 pp., illus. \$69.95.

Frontier Doctor. William Beaumont, America's First Great Medical Scientist. Reginald Horsman. University of Missouri Press, Columbia, MO, 1996. xvi, 320 pp., illus. \$39.95. Missouri Biography.

Genetics and Cancer. A Second Look. B. A. J. Ponder, W. K. Cavenee, and E. Solomon, Eds. Cold Spring Harbor Laboratory Press, Cold Spring Harbor, NY, 1995. viii, 410 pp., illus. \$75. Cancer Surveys, vol. 25.

Geologic Modeling and Mapping. Andrea Förster and Daniel F. Merriam, Eds. Plenum, New York, 1996. xiv, 334 pp., illus. \$95. Computer Applications in the Earth Sciences. From a meeting, Prague, Oct. 1993.

The Great Flood of 1993. Causes, Impacts, and Responses. Stanley A. Changnon, Ed. Westview, Boulder, CO, 1996. xii, 321 pp., illus. \$65; paper, \$24.95.

A Historical Archaeology of the Modern World. Charles E. Orser, Jr. Plenum, New York, 1996. xvi, 247 pp., illus. \$34.95. Contributions to Global Historical Archaeology.

The Historical Atlas of the Earth. A Visual Exploration of the Earth's Physical Past. Roger Osborne and Donald Tarling, Eds. Holt, New York, 1996. 192 pp., illus. \$45

The Hubbard Model. Its Physics and Mathematical Physics. Dionys Baeriswyl et al., Eds. Plenum, New York, in cooperation with NATO Scientific Affairs Division, 1995. xii, 407 pp., illus. \$120. NATO ASI Series B, vol. 343. From a workshop, San Sebastian, Spain, Oct. 1993.

An Illustrated History of Brain Function. Imaging the Brain from Antiquity to the Present. Edwin Clarke and Kenneth Dewhurst. 2nd ed. Norman, San Francisco,

1996. xiv, 189 pp., illus. \$135. Norman Neuroscience, no. 3

Internet for the Molecular Biologist. Simon R. Swindell, R. Russell Miller, and Garry S. A. Myers, Eds. Horizon Scientific, Portland, OR, 1996. 187 pp., illus. Paper, \$32.50 or £319.99. Current Innovations in Molecular Biology, vol. 3.

An Introduction to Genetic Algorithms. Melanie Mitchell. MIT Press, Cambridge, MA, 1996. xii, 204 pp., illus. \$30. Complex Adaptive Systems.

The Lure of Modern Science. Fractal Thinking. Bruce J. West and Bill Deering. World Scientific, River Edge, NJ, 1995. viii, 421 pp., illus. \$58. Studies in Nonlinear Phenomena in Life Sciences, vol. 3.

Molecular Systematics. David M. Hillis, Craig Moritz, and Barbara K. Mable, Eds. 2nd ed. Sinauer, Sunderland, MA, 1996. xvi, 655 pp., illus. Paper, \$49.95.

Origin and Evolutionary Radiation of the Mollusca. John D. Taylor, Ed. Oxford University Press, New York, 1996. xiv, 392 pp., illus. \$135. From a symposium, London, Sept. 1993.

Palaeomagnetism and Tectonics of the Mediterranean Region. A. Morris and D. H. Tarling, Eds. Geological Society, Bath, UK, 1996. viii, 422 pp., illus. \$110 or £366. Geological Society Special Publication no. 105.

Paradox Lost. Images of the Quantum. Philip R. Wallace. Springer-Verlag, New York, 1996. xii, 166 pp., illus. \$29.95.

People of the Great Ocean. Aspects of Human Biology of the Early Pacific. Phillip Houghton. Cambridge University Press, New York, 1996. x, 292 pp., illus. \$64.95.

Quantum Mechanics on Phase Space. Franklin E. Schroeck, Jr. Kluwer, Norwell, MA, 1995. xvi, 668 pp., illus. \$295 or £3189 or Dfl. 440. Fundamental Theories of Physics, vol. 74.

The Quantum Theory of Radiation. E. R. Pike and Sarben Sarkar. Oxford University Press, New York, 1996. xii, 342 pp., illus. \$95. International Series of Monographs on Physics. 86

Replacement, Reduction and Refinement of Animal Experiments in the Development and Control of Biological Products. Fred Brown, K. Cussler, and C. Hendricksen, Eds. Karger, Farmington, CT, 1996. x, 368 pp., illus. Paper, \$300 or CHF 345 or DEM 413. Developments in Biological Standardization, vol. 86. From a symposium, Langen, Germany, Nov. 1994.

Research Trends in Fluid Dynamics. Report from the United States National Committee on Theoretical and Applied Mechanics. J. L. Lumley *et al.*, Eds. AIP Press, Woodbury, NY, 1996. xx, 328 pp. \$50.

The Role of the Bacterial Membrane in Chromosome Replication and Partition. Barbara E. Funnell. Chapman and Hall, New York, and Landes, Austin, TX, 1996. x, 156 pp., illus. \$69.95. Molecular Biology Intelligence Unit.

Seeing Through Statistics. Jessica M. Utts. Duxbury Press (Wadsworth), Belmont, CA, 1996. xvi, 464 pp., illus. \$35.95.

Seventeenth Texas Symposium on Relativistic Astrophysics and Cosmology. Hans Böhringer, Gregor E. Morfill, and Joachim E. Trümper, Eds. New York Academy of Sciences, New York, 1995. xvi, 728 pp., illus. \$190. Annals, 759. From a symposium, Munich, Germany, Dec. 1994.

Solving Problems with NMR Spectroscopy. Atta-ur-Rahman and Muhammad Iqbal Choudhary. Academic Press, San Diego, 1995. xvi, 430 pp., illus. Paper, \$34.95.

Tamoxifen. Beyond the Antiestrogen. John A. Kellen, Ed. Birkhäuser Boston, Cambridge, MA, 1996. x, 377 pp., illus. \$94.50.

Thermodynamic Theory of Site-Specific Binding Processes in Biological Macromolecules. Enrico Di Cera. Cambridge University Press, New York, 1996. xvi, 296 pp., illus. \$69.95.

Understanding Relativity. A Simplified Approach to Einstein's Theories. Leo Sartori. University of California Press, Berkeley, 1996. xiv, 367 pp., illus. \$50 or £340; paper, \$19.95 or £315.95.

The Vinland Map and the Tartar Relation. R. A. Skelton, Thomas E. Marston, and George D. Painter. 2nd ed. Yale University Press, New Haven, CT, 1996. lxvi, 291 pp., illus., + plates. \$45.